

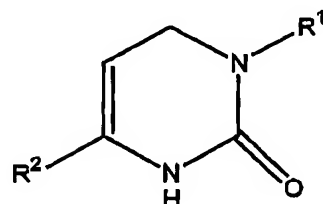
T3090(C)

22

US

Claims

1. A method of imparting a cooling sensation to a human comprising administering to said human, a compound according to Formula [I];



[I]

wherein R^1 and R^2 are independently selected from hydrogen or halogen atoms; hydroxy, cyano, nitro, mercapto, carbonyl, sulfone and carboxy groups; or optionally substituted alkyl, alkenyl, alkoxy, alkylthio, aryl, aryloxy, arylthio, amino, siloxy, ester and heterocyclic groups, with the proviso that when R^1 is 2-hydroxyphenyl, R^2 is other than 3-nitrophenyl.

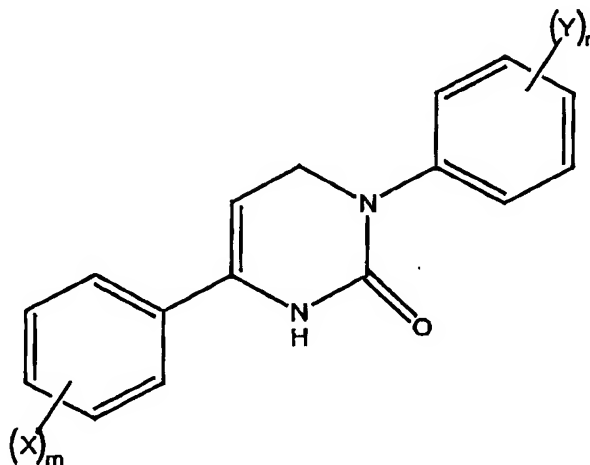
2. The method of Claim 1, wherein R^1 is an optionally substituted alkyl or aryl group.
3. The method of Claim 2, wherein R^1 is an optionally substituted aryl or cyclic hydrocarbon group.
4. The method of claim 1, wherein R^2 is a hydrogen atom, or an optionally substituted alkyl or aryl.

T3090(C)

23

US

5. The method of Claim 4 wherein R^2 is an optionally substituted aryl or cyclic hydrocarbon group.
6. The method of Claim 5 of a compound of formula [II]:



[11]

wherein the or each X and Y is independently a halogen atom or a alkyl, alkenyl, haloalkyl, alkoxy, hydroxy, thiol, carboxy, nitro, sulphonamide, sulphonato, sulphonyl, alkoxycarbonyl, carbonyl or amino group, and m and n are independently 0, 1, 2 or 3.

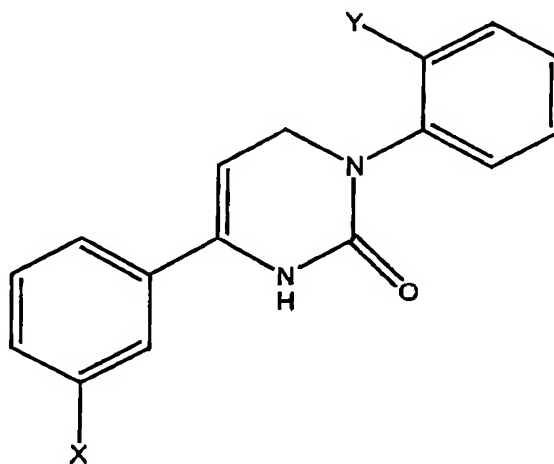
7. The method of Claim 6, wherein the or each X is independently a hydrogen or halogen atom, or a nitro, hydroxy, C₁₋₆ alkyl, C₁₋₆ haloalkyl or C₁₋₆ alkoxy group.
8. The method of Claim 6, wherein the or each Y is independently a hydroxy, C₁₋₆ alkyl or C₁₋₆ alkoxy group.

T3090(C)

24

US

9. The method of Claim 6, wherein m is 1.
10. The method of Claim 6, wherein n is 1.
11. The method of Claim 10, wherein the compound has the formula [III]:



[III]

wherein the or each X and Y is independently a halogen atom or a alkyl, alkenyl, haloalkyl, alkoxy, hydroxy, thiol, carboxy, nitro, sulphonamide, sulphonato, sulphonyl, alkoxycarbonyl, carbonyl or amino group, and m and n are independently 0, 1, 2 or 3.

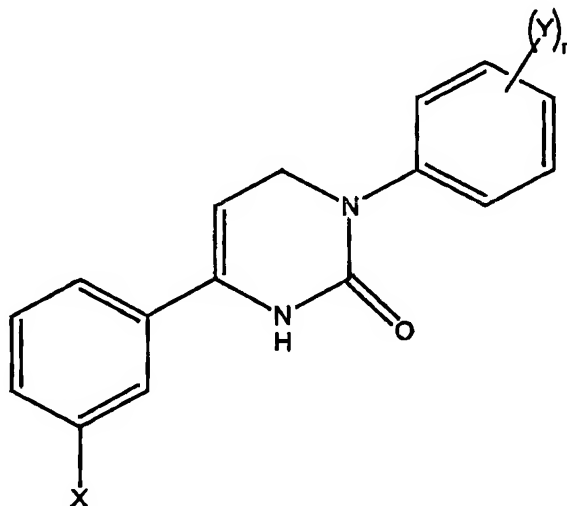
T3090(C)

25

US

12. A method of imparting a cooling sensation to a human, the method comprising administering to said human, a compound is selected from the group consisting of 1-(2'-methoxyphenyl)-4-(3''-nitrophenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-phenyl-4-(3''-nitrophenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-(2'-methoxyphenyl)-4-(3''-chlorophenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-(2'-methylphenyl)-4-(3''-nitrophenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-phenyl-4-(3''-chlorophenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-(2'-methoxyphenyl)-4-(3''-methoxyphenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-phenyl-4-(3''-methoxyphenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-(2'-hydroxyphenyl)-4-(3''-methoxyphenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-(2'-trifluoromethylphenyl)-4-(3''-nitrophenyl)-1,2,3,6-tetrahydropyrimidine-2-one, 1-phenyl-4-(3''-nitrophenyl)-1,2,3,6-tetrahydropyrimidine-2-one or 1-(2'-hydroxyphenyl)-4-phenyl-1,2,3,6-tetrahydropyrimidine-2-one and mixtures thereof to produce a cooling sensation.

13. A compound of formula [IV]:



[IV]

T3090(C)

26

US

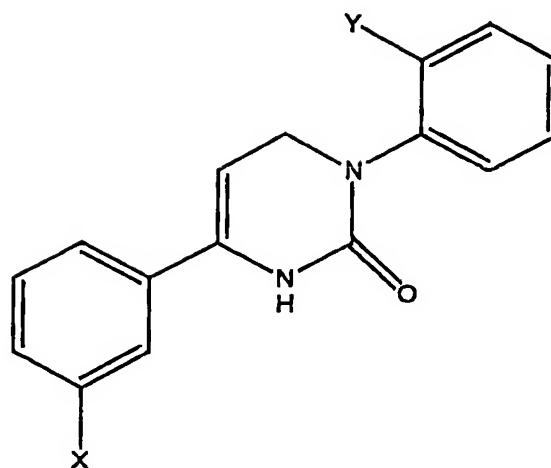
or a salt thereof, wherein X is a hydrogen or halogen atom, or a hydroxy, nitro, alkyl or alkoxy group; Y is hydrogen, hydroxy, haloalkyl, nitro or alkoxy; and n is 0, 1, 2 or 3, with the proviso that when n is 1 and Y is hydroxy, X is not nitro.

14. The compound of Claim 13, with the proviso that when n is 1 and Y is hydroxy, X is not a halogen atom.
15. The compound of Claim 13, wherein Y is hydroxy or alkoxy, with the proviso that when n is 1 and Y is hydroxy, X is alkyl or hydroxy.
16. The compound of Claim 13, wherein n is 1.
17. The compound of Claim 13, wherein n is 1 and Y is hydroxy.
18. The compound of Claim 13, wherein Y is haloalkyl.
19. The compound of Claim 18, wherein Y is trifluoromethyl.
20. The compound of Claim 13, having the formula [V]:

T3090(C)

27

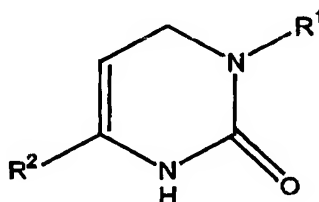
US



[V]

wherein Y is C₁₋₆ alkoxy.

21. The compound of Claim 13, wherein X is a chlorine atom or a methoxy group.
22. A toothpaste composition comprising a compound of formula [I]:



[I]

or a salt thereof to produce a cooling sensation, wherein R¹ and R² are independently selected from hydrogen or halogen atoms; hydroxy, cyano,

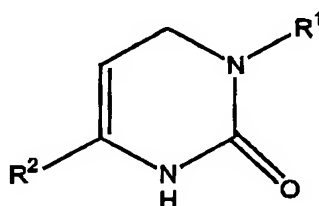
T3090(C)

28

US

nitro, mercapto, carbonyl, sulfone and carboxy groups; or optionally substituted alkyl, alkenyl, alkoxy, alkylthio, aryl, aryloxy, arylthio, amino, siloxy, ester and heterocyclic groups.

23. The toothpaste composition of Claim 22, with the proviso that when R¹ is 2-hydroxyphenyl, R² is other than 3-nitrophenyl.
24. The toothpaste composition of Claim 22, additionally having any of the features of Claims 2 to 12.
25. A mouthwash composition comprising a compound of formula [I]:



[I]

or a salt thereof to produce a cooling sensation, wherein R¹ and R² are independently selected from hydrogen or halogen atoms; hydroxy, cyano, nitro, mercapto, carbonyl, sulfone and carboxy groups; or optionally substituted alkyl, alkenyl, alkoxy, alkylthio, aryl, aryloxy, arylthio, amino, siloxy, ester and heterocyclic groups.

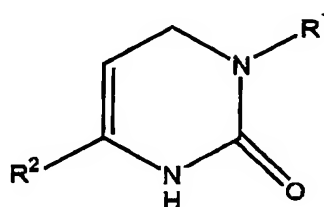
26. The mouthwash composition of Claim 25, with the proviso that when R¹ is 2-hydroxyphenyl, R² is other than 3-nitrophenyl.

T3090(C)

29

US

27. The mouthwash composition of Claim 25, additionally having any of the features of Claims 2 to 12.
28. A food product composition comprising a compound of formula [I]:



[I]

- or a salt thereof to produce a cooling sensation, wherein R^1 and R^2 are independently selected from hydrogen or halogen atoms; hydroxy, cyano, nitro, mercapto, carbonyl, sulfone and carboxy groups; or optionally substituted alkyl, alkenyl, alkoxy, alkylthio, aryl, aryloxy, arylthio, amino, siloxy, ester and heterocyclic groups.
29. The food product composition of Claim 28, with the proviso that when R^1 is 2-hydroxyphenyl, R^2 is other than 3-nitrophenyl.
30. The food product composition of Claim 30, wherein the food product is a beverage.
31. The food product composition of Claim 30, wherein the food product is ice-cream.

T3090(C)

30

US

32. The food product composition of Claim 30, wherein the food product is a spread.
33. The food product composition of Claim 30, wherein the food product is a confectionery product.